

FOLIO

UNIVERSITY OF ALBERTA
25 FEBRUARY 1994



INSIDE

- Academic All-Canadians: We're number one
- Easy does it on the AHFMR funding
- U of A, government to manage Rose Creek Education Forest

Geneticists receive \$644,000 from Canadian Genome Analysis and Technology Program

Will use fruit fly to improve upon chromosome mapping techniques

By Michael Robb

To a great extent, nature has used the same blueprint to design fruit fly genes and human genes. Geneticists have known this for the last decade, and research into the genetics of *Drosophila melanogaster* has been subsequently used in the investigation of human biology and genetics.

Now that lowly fruit fly is going to come under more intense scrutiny here at the University of Alberta, as part of a worldwide effort to better understand human chromosomes. Six genetics professors and one microbiology professor have been awarded \$644,000 over three years from the Canadian Genome Analysis and Technology Program of the Medical Research Council.

"Our experience in mapping the small fly genome will help us in the bigger project," says Ross Hodgetts (Genetics). "These organisms—which typically end up in Edmonton on your bananas in May—are much easier to work with than humans. Knowing what the genes do in fruit flies gives us a jump start in understanding what the gene does in humans."

A genome is the total genetic material within a cell. DNA (deoxyribonucleic acid) forms the genetic material of all cells and is a major component of chromosomes, which are linear sequences of genes, plus additional nongenetic nucleic acid sequences.

The U of A team is one of many teams in Europe, the United States and Canada, all in-

volved in a concerted and increasingly coordinated effort to map the chromosomes of human beings. "That project is focused on essentially producing a road-map of every human chromosome, so that we know not only the order of the genes along the chromosome, but their distance from one another," explains Dr Hodgetts.

The project has received a huge amount of funding in the United States. But researchers around the world realized that they would gain valuable information by devoting some of the resources to mapping the genomes of a select group of model organisms, like the fruit fly and common yeast. That's where projects like the one based here come in.

The U of A's Genetics Department is particularly strong in the study of this fruit fly's genetic composition. As well, team member Heather McDermaid has developed a technology to isolate *Drosophila*'s fourth chromosome, which is organized more like a human chromosome than the other fruit fly chromosomes.

"A chromosome is a mosaic of unique sequences attached to repetitive sequences," Dr Hodgetts outlines. It's that organization of unique and repetitive sequences on the fourth chromosome that is similar to most human chromosomes.

"We hope that the strategies we develop to map the *Drosophila* fourth chromosome,

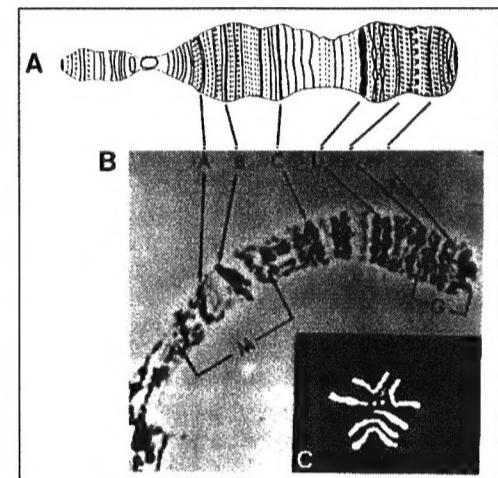
with its high density of repetitive sequences, will be very useful for scientists mapping human chromosomes, which also have a high density of repetitive sequences," says Dr Hodgetts, adding that producing a map of a chromosome with a lot of repetitive sequences is very difficult.

The task is staggering in its size and scope. DNA molecules are made up four chemical building blocks called bases. "The *Drosophila* chromosome has about five million building blocks."

Using high-tech molecular biology, the chromosome is chopped up into pieces with enzymes. In effect, the DNA strand of the fourth chromosome is cut into more manageable pieces. The pieces are then cloned for ease of analysis.

The ultimate goal is to determine the exact sequence of bases from one end of chromosome four to the other. "That's an awesome job," Dr Hodgetts says, pointing out that the pieces they clone will be between 20,000 and 60,000 bases long. Genetics Professor and group member John Locke has developed a method to put those pieces of the chromosomal road-map back together in their correct order.

"From this road-map, we'll get all the cities (genes) along the way, but like a road-map there will be sections where not a lot



Photograph and diagram of chromosome 4 of *Drosophila melanogaster*

happens," Dr Hodgetts explains. "We estimate this chromosome has about 80 genes on it."

Other members of the group are Genetics Professors John Bell, David Pilgrim, David Nash and Asad Ahmed, and Microbiology Professor Ken Roy. Four technologists will be hired to work on the project and four undergraduates will be put to work during the summers.

This is the second peer-reviewed competition held by the CGAT program. Only six of the 14 applications were funded this time.

Feeling stressed out? There's help on campus

Stress levels high among students — Student Counselling Services

By Michael Robb

People on the Student Services' front lines say stress levels among students are extraordinarily high.

Stress is the number one reason students turn to us, says Student Counselling Services Coordinator Barbara McKenzie. "We see students who have stress related to academic problems," she says. "And when you think about it, everyone who walks in our door is probably stressed."

Some students haven't kept up with their studies, they may have family problems and they ignore them until they reach a crisis point.

"That's not an unusual scenario," Dr McKenzie says. Then they visit Student Counselling Services, often citing academic reasons first. Scratch the surface, however, and you find the problems are much more complex.

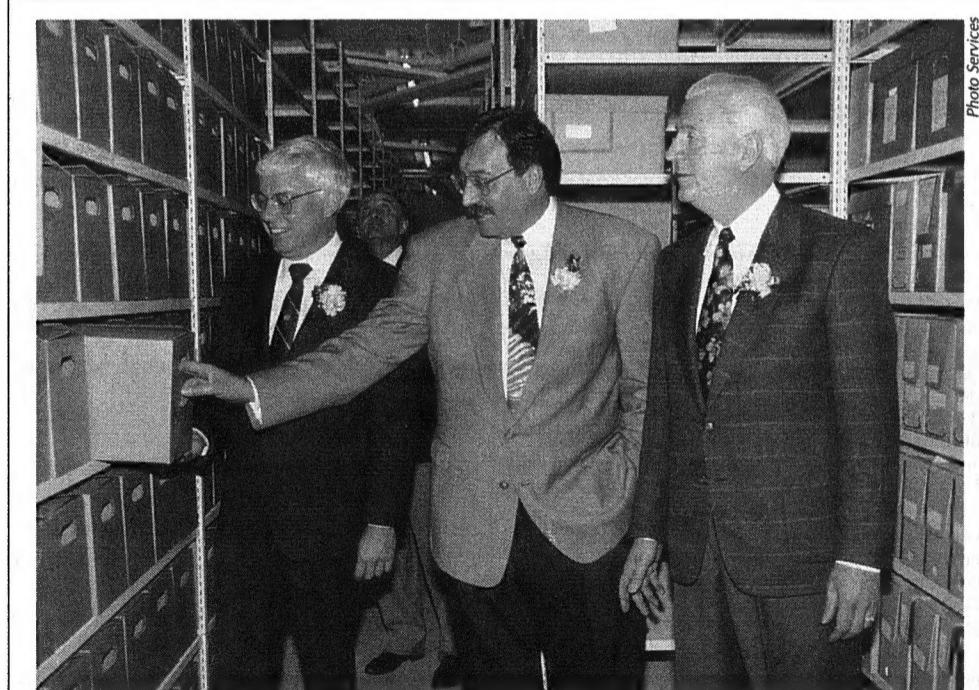
Some first-year students with high hopes come in after bombing the first set of mid-terms, and they're absolutely devastated. They realize it may affect their chances two years down the road, she explains. In fact, says Career and Placement Services Director Wendy Coffin, their staff sometimes has to ease students' anxieties about marks.

Stress levels in residences are definitely more pronounced around mid-term times, says Residence Life Program Manager Michel Ouellette. A neighbour's stereo may have hitherto not been a problem, but at examination time, it can be a flashpoint for conflict between neighbours, he says.

In November and December there was an increase in the number of students who went to Student Counselling Services, says Dr McKenzie. This academic year there have been several suicide attempts.

There's a lot more pressure on students to perform academically, particularly in the professional Faculties, she says. Furthermore, some of these students just don't see jobs at the end of their university studies—and that's depressing.

While undergraduates face the prospects of unemployment and an increasingly competitive university environment, graduate students face other pressures. "The biggest source of stress for foreign students [many of whom are graduate students] is financial pressure," says International Centre Director Bruce Caldwell. For some,



Ernie Ingles, Director of Libraries, centre, conducts a tour for President Paul Davenport, left, and the Honourable Jack Ady, Minister of Advanced Education and Career Development, at the official opening of the Book and Record Depository (BARD), 16 February. BARD (formerly known as Eastpoint) is located off campus at 8170 50 Street. It has a capacity to house three to five million volumes and will free 700-1,000 urgently needed reading/study spaces on campus, previously used to store library materials.

Researchers urged to make the most of their AHFMR funding

Two funds oversubscribed

By Michael Robb

Economize!

That's what members of the Alberta Heritage Foundation for Medical Research's Internal Allocations Committee here on campus are asking fund applicants to do.

"There are now more applicants than we can afford to fund," says Committee Chair Bill Page (Microbiology). "We'd like to support all we can, but we just can't do it now."

AHFMR established two funds at the U of A more than a decade ago. The visiting lecturer fund brings recognized speakers with international reputations to campus to conduct research seminars, visit with staff members and graduate students, and meet with other community groups and organizations. The staff travel fund allows medical, biomedical and health care faculty to attend meetings, present research results and collaborate with colleagues.

The visiting lecturer fund grant this year was \$215,000 and the staff travel grant was \$157,500.

Dr Page says both funds have been extraordinarily useful for researchers, but "we cannot expect an increase in the grant, so we need to be more economical in how it is used. Applicants must economize in their travel and accommodations and think more seriously about cost sharing."

AHFMR is also encouraging researchers at both major Alberta universities to do more cost sharing. For example, if a researcher is being brought to the U of A, that person may find it worthwhile to visit colleagues at the U of C during the same trip. That will require more coordination, says Dr Page, but those kinds of applications for funding will be looked upon very favourably.

Two new programs will be introduced in April. One will support short collaborative visits between U of A researchers and other Alberta research institutions. The other program will support short workshops involving researchers from the U of A, U of C, and other

institutions and external speakers with common interests or collaborations.

Dr Page says the new programs will encourage researchers to get to know more about what expertise exists within the province.

"This funding is a wonderful gift from the AHFMR," says Dr Page. "We estimate this has resulted in more than 2,000 speakers being brought to campus and about 1,250 trips to conferences by our staff members. This has had a real impact on the international profile of U of A research."

The visiting lecturer fund has encouraged young scientists to stay at the U of A as AHFMR scholars or other recruits, especially when they see the facilities available at this University."

Members of the Internal Allocations Committee are: Dr Page, Microbiology; Rex Holland, Dentistry; Tessa Gordon, Neuroscience; Joel Weiner, Medicine; Terry Davis, Nursing; and David Schiff, Pediatrics.

LETTERS TO THE EDITOR

An open letter to Sandy Mactaggart

In an article headlined "Mactaggart commends administration," in the 4 February 1994 issue of *Folio*, you are quoted as saying "we who are the University, are prepared to support the difficult selective decisions that will maintain the quality of a great university."

I beg to differ.

I cannot support an administration that has targeted my Faculty for 42 percent of the announced budget cuts. This is grossly unfair.

I cannot support an administration that has made the Faculty of Education a scapegoat for the financial restraints facing the University. In these difficult times we need to present a united front to government and the public at large. By discrediting a part of the University we stand in danger of discrediting the University as a whole.

I cannot support an administration that appears to have a hidden agenda with regard to the "select" teaching and research areas which will be promoted within the University. The University of Alberta is already a leader in teacher education in Canada and the Commonwealth. To be consistent with the principles enunciated in *Quality First* the excellence of our programs should be supported, not decimated.

I cannot support an administration that by implication and innuendo passes negative judgment on the excellence of the accomplishments of my Faculty. I feel insulted that the decisions with such drastic effects on the quality of our programs have been made by administrators with no expertise in the field of teacher education.

It is upsetting that you expect me as a member of the Faculty of Education to support the "selective" decisions of an anti-Education University administration.

Carolyn R Yewchuk

Professor of Educational Psychology

Ed. note: With respect to the 42 percent cited in Professor Yewchuk's letter, *Quality First* proposes that the operating budget for the Faculty of Education be reduced by \$5 million over a period of three years beginning in 1994-95. "A \$5 million budget reduction is a 25 percent decrease in Education's 1993-94 budget. The \$5 million reduction target is inclusive of reductions required to meet annual budgets through the 1996-97 fiscal year," the document states.

'Research Revelations' exceeds expectations

All systems go for 5 March event

By Folio staff

In the initial planning stages of "Research Revelations '94", it was felt that at least 60 submissions would be needed if the six-hour poster session was to be successful.

At the close of the deadline date, 15 February, there were approximately 290 submissions and two very pleased co-organizers, Bob Crawford (Chemistry) and David Norwood (Office of the Vice-President (Research)).



"It's chockablock and there's a tremendous variety of submissions," Dr Crawford says of the poster session which is intended to help researchers learn more about what their fellow researchers on campus are doing.

It will be held Saturday, 5 March, on the second floor of the Heritage Research Centre.

Researchers will describe and explain their research projects in pictures and in words on poster boards. These boards will then be placed in disciplinary areas around the room.

Two hundred and thirty researchers will present papers (counting co-authors and other contributors, more than 500 people are associated with the research and writing of the papers). Titles include: "The Space Environment", "Investigating the Reinforcing Value of Running", "Mokken Analysis of Instructor Evaluations", "Stock Market Volatility in a Heterogeneous

Information Economy", "Emotion and Stress: Effects of the Job on a Sample of Canadian Workers", and "Shakespeare's Globe Theatre: A Reconstruction".

"It's really important for researchers to know what other researchers are doing," says David Cass (Botany). "Maybe collaborations can come out of this."

The room will open at 10 am and close at 4 pm. Refreshments will be available.

"Research Revelations '94" is sponsored by the Office of the Vice-President (Research). The event will be conducted on an annual basis.

U of A and U of C collaborate to show off their best

Alberta Pharmaceutical Showcase attracts 14 companies

By Folio staff

Alberta's best university researchers displayed their work for 14 pharmaceutical companies who came to the University of Calgary on 17 and 18 February for the second phase of the Alberta Pharmaceutical Showcase. Phase I was held in Edmonton in November.

The University of Alberta and the University of Calgary collaborated to present a wide range of research projects which have good potential for partnerships with industry.

The purpose of the Showcase is twofold. Joel Weiner, the U of A Faculty of Medicine's Associate Dean for Research, explained that both universities hope to attract research grants and contracts, but more importantly, want to inform pharmaceutical companies

about the exciting research under way here in Alberta.

"The biggest problem we have is convincing the companies that it's worth going beyond the Montreal and Toronto areas," said Dr Weiner. "All the companies have offices and research labs there and are familiar with researchers at eastern universities, so we have to work hard to tell our story."

Dr Weiner stated that most universities in Canada are holding similar programs. Bill C-91 on Patent Protection, passed last year by the federal government, requires pharmaceutical companies to invest the equivalent of 10 percent of their sales in research. All universities are looking at this as a new source of funds. "It is very competitive," acknowledged

Dr Weiner. "We hope to get our fair share of those funds."

Four areas of province-wide research strength were chosen to be highlighted in the 1993-94 Showcase. The November session focused on neurosciences, and proteins and peptides. Last week's meeting concentrated on research in infectious diseases and in cardiovascular research.

The Calgary Showcase featured the 18 best projects from each university. Only about half of the abstracts submitted were chosen for presentation. U of A projects included research into therapeutic agents to combat "hamburger disease", and research into methods for identifying potentially harmful side effects of antibiotics and other drugs.



University
of
Alberta

Workshop looks at pros and cons of doing research for government

By Michael Robb

Can the University of Alberta's social sciences and humanities researchers collaborate with government to conduct research?

The answer, three University researchers suggested last week, was of course, but there will be costs associated with that collaboration.

At a workshop sponsored by the Research Grants Office, co-panelist Gene Ratsoy (Educational Administration) said there are a number of advantages in doing research for government. It's often an opportunity to integrate theory with practice and test policy models. Networks are built; the University's reputation is enhanced; research skills are developed; graduate students receive valuable training; interdisciplinary work is promoted; and, internship opportunities are provided.

But there are risks, Dr Ratsoy said. Timelines are often too short and don't fit neatly with the University's calendar. There are sometimes moratoriums on the release of findings. The impact of studies is uncertain; some studies simply serve political agendas; and, there are costs associated with collaboration.

This (provincial) government is very interested in awarding the private sector with contracts, he said, so University-based researchers have to demonstrate that they have strengths the private sector does not have. For example, University researchers have tremendous access to highly skilled researchers. Nor are they as interested in a bottom line, Dr Ratsoy suggested.

Former Population Research Laboratory Director Harvey Krahn said it's really a matter of determining whether what University researchers want and what government wants are compatible. Government wants information that's relevant, useful and not embarrassing; short, precise findings completed on time; and the status of university-based research without the trimmings. Researchers want money with few strings attached, enough time and flexibility to do the work properly, and academic respect.

If researchers want to gain government-sponsored work, they will have to define their research in policy-relevant terms, the Sociology professor said. As well, University researchers have to explain University requirements up front before the work begins.

Ultimately, however, there will always remain some responsibility on the part of the University to sponsor research in the social sciences and humanities for those researchers who can't sell their research.

Ted Chambers, Director of the Western Centre for Economic Research, said it is going to become increasingly important for the University to disseminate its research in ways people can understand. The Centre tries to mesh the University's internal capabilities with external interests, and to get that information out into the broader community.

People are listening to the University define itself as, in part, a research institution, and are going to increasingly ask: Where is the research? If it's in the *Canadian Journal of Economics*, it won't reach that many people, Dr Chambers said.

Hyndman Award winners gather, learn more about leadership

The Lou Hyndman Edmonton Glenora Awards, among the most prestigious student honours at the University of Alberta, were bestowed 14 February on Trevor Hoffman (third year, Business) and Jody Saarela (third year, Political Science).

Hoffman is interested in international business and politics, especially in the area of discovering and developing new energy sources. Saarela is interested in public policy formation. Both students have been actively involved as volunteers, in campus activities and in the community.

Welcoming Hoffman and Saarela to the Hyndman group of scholars were 1992-93 recipients Jasmine El-Nahhas and Kory McDonald (whose awards were renewed this year) and previous recipients Kim Gowin, Leanne Walls, and Robert O'Neill.

Lou Hyndman spoke to the students about leadership and cited President Paul Davenport as an example of the kind of leaders society needs today. Hyndman described

four critical components of successful leadership: possessing both "roots and wings"; having the discipline and vision to plan; knowing when to listen to advice and when to make a decision; and, being able to laugh at one's own foibles. He praised Dr Davenport for producing the strategic planning document *Degrees of Freedom*, for understanding the importance of tradition while having the courage to change, and for realizing that decisions must be taken with the best information available.

Some leaders get stuck in the listening phase, others listen to all advice equally and try to please everyone, others request more and more information. Knowing how and when to make decisions is one of the determinants of true leadership, according to Hyndman.

Lou Hyndman Edmonton Glenora Awards recipients are selected by a Scholarship Committee chaired by Peter Meekison, former Vice-President (Academic).

REVIEW OF CHIEF LIBRARIAN

As arranged under contractual procedures, a review committee advisory to the Vice-President (Student and Academic Services) has been struck. Its purpose is to provide Mr Ernie Ingles, Chief Librarian, with guidance that will be useful to him in developing policies and administrative procedures. This notice is to invite members of the University community to comment on Mr Ingles' work on the following issues:

- strategic planning,
- planning for implementation of strategic directions,

- library management (collections, budget, staff, physical facilities and arrangements, etc),
 - service to the University and wider community,
 - consultation and interaction with the University community, and
 - his vision for the future of provision of information services in the academic setting.
- Please send your comments to: Lois M Stanford, Vice-President (Student and Academic Services), 3-5 University Hall, or Stanford@vm.ucs.ualberta.ca.



Lindsay Crowshoe and Danika Edmunds, recipients of the 1993 Darcy Tailfeathers Memorial Award in Medicine.

Outstanding native medical students win awards

By Judy Goldsand

Lindsay Crowshoe, a Blackfoot student from the Peigan Nation in southern Alberta, is the first Albertan to win one of the Darcy Tailfeathers awards established in memory of the Faculty of Medicine's first native student who was tragically killed in an automobile accident. The second winner is Danika Edmunds, the first Inuit and first female recipient of the award.

Both students will graduate next year.

Candidates for the Tailfeathers awards must be of native ancestry and demonstrate satisfactory academic standing, leadership qualities and commitment to native traditions and values.

Crowshoe completed his undergraduate studies at the University of Calgary where he played football for the Dinosaurs and was a member of the 1988 Vanier Cup championship team. A winner of numerous academic and athletic awards, he is also a talented musician and songwriter.

Crowshoe, who was a cousin of Darcy Tailfeathers, has been an inspiring role model in his community for many years.

Active in student affairs, Crowshoe organized the Native Health Issues Committee for the Students' International Health Association and is a founding member of the Native Medical Students' Association of Canada.

He is also the Canadian member for the Association of Native American Medical Students. His interests in traditional Indian culture and healing led him to organize workshops, retreats and traditional sweats to familiarize his classmates with these issues.

After completion of his medical training, Crowshoe intends to practice in his home community in southern Alberta.

Danika Edmunds is Canada's only Inuit medical student and will be the first female Inuit physician. (Currently, Canada's lone Inuit physician is Dr Noah Carpenter who received his surgical training at the University of Alberta.)

Edmunds, who was born and raised in Newfoundland, is also a founding member of the Native Medical Students' Association of Canada. She represents the native medical students in the University of Alberta American Indian Science and Engineering Society. A talented pianist, Edmunds, like Crowshoe, is a well-known role model in her own community. She hopes to pursue studies in Family Medicine.

Both students remarked that it was nice the Faculty had established this award in recognition of Darcy Tailfeathers' accomplishments, and they were honoured to have been chosen as recipients.

The Office of the Vice-President (Research) takes pleasure in announcing the

1994 Laureates of the J Gordin Kaplan Award for Excellence in Research

Dr Gary Kelly

Department of English
Faculty of Arts

and

Dr Dale Vitt

Department of Botany
Faculty of Science

The Awards Ceremony will be held
on

Tuesday, 15 March 1994, at 4 pm

Room 2-115 Education North

Reception will follow

All University staff are welcome

For further information, please call 492-0868

GSA holding referendum on dental/health insurance

By Folio staff

Graduate students will be asked 10 and 11 March in a referendum whether or not full-time graduate students should be required to purchase medical and dental plans.

There will be two separate questions put to approximately 4,300 eligible voters. The first question will ask whether full-time graduate students would be required to purchase medical benefits at a cost of \$45 per year, starting 1 September.

The second question will ask whether full-time graduate students would be required to purchase dental benefits at a cost of \$105 per year. That premium would be guaranteed for three years.

The Graduate Students' Association has developed a proposed medical and dental plan. "There was a lot of discussion last year about a health and dental plan," explains GSA President Frank Coughlan. Two questions arose: Would graduate students support it? And is such a plan needed? "I think the answer to both those questions is yes."

The dental plan is organized through the National Student Health Network, a service of the Canadian Federation of Students. The health plan is underwritten by Blue Cross.

Before the GSA-sponsored referendum is held, information packages will be sent to graduate students, and information sessions will be held in various departments across campus.

In a survey conducted late last year by the GSA, 71.4 percent of graduate students who responded said they didn't have dental insurance. If the GSA develops a medical/dental plan which meets your willingness and ability to pay, do you strongly agree or disagree that it should be implemented? graduate students were asked. About 50 percent strongly agreed and another 20.4 percent agreed.

About 46 percent of the respondents said they would be willing to pay up to \$100 per year for a health/dental plan, and another 30.5 percent said they would be willing to pay between \$100 and \$200 per year. That was the most striking response, Coughlan said.

"If graduate students can't afford to pay for a dental/health plan, then I don't want them to vote for the plan," said Coughlan, pointing out that it was the GSA council's desire to put the questions to a referendum. "There'll be some students who don't want it or can't afford it, and we certainly don't want to be the straw that breaks the camel's back."

Read it (*The Diviners*) and reap

To help celebrate Canada's 10th annual Freedom to Read Week, 28 February to 7 March, a complete reading of *The Diviners* by Margaret Laurence will take place on campus. Come and hear the readings, or be a reader yourself.

Readings will be held in the main floor lounge area of SUB directly opposite the University Bookstore, 11 am to 2 pm Tuesday, 1 March, through Friday, 4 March.

Volunteer readers—students and staff—can sign up for half-hour time slots by contacting the main office of the School of Library and Information Studies at 492-4578.

Rose Creek Education Forest established

University, government co-managers

By Judy Goldsand

An agreement between the University of Alberta and the provincial government opens up new vistas for the Department of Forest Science and its students.

Bruce Dancik, Forest Science Chair, and the Honourable Brian Evans, Minister of Environmental Protection, signed an agreement 10 February to form a University-government partnership to manage 19,000 hectares of Crown land that will form the Rose Creek Education Forest.

The University will be responsible for the development of management plans to integrate all existing resources and uses of the area.

"Co-management of the land with government and the public for long-term use will be good for students," says Jack Heidt, Associate Chair of Forest Science. The area will provide the department and Faculty with many options for teaching, research, and demonstration activities. Besides diverse types of forest cover, the site encompasses oil fields, trap lines, historic sites, and cross-country ski trails, so Forest Science students will have opportunities to work with

and study real situations in integrated forest management.

The forest is located about two hours (167 km) by car southwest of Edmonton on Highway 13.

Kim Clark, the forestry consultant heading the team that will develop the management plans, says that to him the 'spirit of the forest' "refers to the wonderful spirit of cooperation shown by everyone involved to keep this land as forest." A new Public Advisory Committee will ensure that area residents continue to participate in the planning and operation of the Forest.

Members of the Advisory Committee and other residents of the Alder Flats area were among the 70 people who celebrated at the signing ceremony, hosted by Ed Tyrchniewicz, Dean of Agriculture, Forestry and Home Economics.

Funds for operating the Rose Creek Education Forest are part of a bequest to the Department of Forest Science more than 15 years ago by retired forester and environmentalist JRH (Herbert) Hall.

Education salutes teaching award winners

By Sandra Halme

A common thread among this year's Faculty of Education teaching award recipients is their love for the discipline and their ability to challenge their students. According to their nominators, all three professors have demonstrated this ability throughout their many years of teaching.

The Faculty recently honoured Moira Juliebo (Elementary Education), John Mitchell (Educational Psychology), and David Wangler (Educational Foundations) with the 1994 Undergraduate Teaching Awards. Each receives money to be used to help cover expenses of attending an education-related conference.

Dr Juliebo came to the University in 1986 following more than 15 years teaching in Scotland. She has since taught 34 undergraduate courses and has been involved in nine research projects, seven of which are complete and published. In 1989, she was nominated by the Education Students Association as the most inspiring professor. Dr Juliebo is known for inspiring several students to pursue

graduate work and for emphasizing learning by doing.

Dr Mitchell has been the coordinator and primary instructor for Educational Psychology 163 since he came to campus in 1969. He has taught more than 16,000 students and has supervised, trained or tutored more than 150 graduate teaching assistants (34 have gone on to become professors themselves). One student pointed out the importance of having role models who represent the best in teaching, and said that Dr Mitchell's students continually benefit in this manner.

During his 25 years on campus, Dr Wangler has consistently been chosen one of the Faculty's top professors. He received more widespread recognition in 1987 when the Undergraduate Teaching Awards Committee chose him as a recipient of the Rutherford Teaching Award. In the words of one of his students, "courses like this one finally allow students to express themselves without compromises being made". Another said, "This class enlightened my intellect and made me look at the world a little differently".

Alumni Association Awards

The Alumni Association requests nominations for its most prestigious awards, which will be presented at Reunion Weekend '94 (1 October):

Distinguished Alumni Awards

A maximum of three Distinguished Alumni Awards will be presented to recognize "exceptional contributions to a profession and/or outstanding contributions and service to the University of Alberta, society or the welfare of others." Nominees must be living graduates of the University of Alberta. Those who are, at the time of nomination, employees of the U of A, members of its Board of Governors or Senate, or serving on Alumni Council, are not eligible.

Alumni Golden Jubilee Award

The Alumni Golden Jubilee Award was initiated in 1958 to honour individuals who have contributed to the welfare of the University, either directly or indirectly. Nominees need not be graduates of the University.

Nominations for both awards must be made in writing. For official nomination forms, contact the Communications Committee, c/o Office of Alumni Affairs, 450 Athabasca Hall, University of Alberta, Edmonton, Alberta, Canada T6G 2E8. Telephone: 492-3224. Please specify which awards you are interested in. The deadline for receipt of nominations is 31 March 1994.

CURRENTS



Exam prep workshop

The Learning Resources Program is running an Exam Preparation Workshop on Saturday, 5 March, from 9 am to noon. The cost is \$30 and students can register at the Academic Support Centre, 102 Athabasca Hall, 492-2682.

Math/Stats Career Forum

Career and Placement Services is sponsoring a Math/Stats Career Forum, Wednesday, 9 March, 6 to 9 pm in 289 CAB. Tickets are available at CaPS, 4th Floor Students' Union Building, for \$3. Remaining tickets will be sold at the door for \$4.

Medical Research Council open forum

An open forum on the MRC Strategic Plan Advisory Committee's recommendations and how they affect researchers is scheduled for Monday, 28 February, at 1:30 pm in Classroom D, 2F1.04 Mackenzie Health Sciences Centre.

MRC Regional Director Joel Weiner invites people to "take the opportunity to discuss your thoughts about the Strategic Plan; the Interim Advisory Committee Reports [available in his office]; the Committee structure; our representation on grant review panels; future initiatives and your perceptions of the MRC or anything else about MRC that concerns you."

NOMINATIONS FOR ACADEMIC STAFF TO SERVE ON THE BOARD OF GOVERNORS

On 1 August 1994 there will be a vacancy on the Board of Governors for one academic staff representative. This position is currently held by Dr Tom Powrie, Department of Economics. The other academic representative on the Board is Dr Ron Bercov, Chair of the Department of Mathematics. (Dr Bercov steps down from his position as Chair on 30 June 1994.)

The procedures which govern these elections are contained in Section 22 of the GFC Policy Manual and are available in the University Secretariat, 2-5 University Hall. These regulations provide that the academic staff representatives on the Board may be full-time or part-time continuing academic staff (Category A1.0), and that at least one of the two representatives be a full-time continuing member of the teaching faculty (Category A1.1) who does not hold an administrative position. Since Dr Bercov will not hold an administrative position after 30 June, the vacancy to be filled this summer is open to any MEMBER OF CATEGORY A1.0.

Nominations are therefore now being sought from among continuing academic staff in Category A1.0.

Nominations can be submitted in writing to Ellen Schoeck, Secretary to GFC, 2-1 University Hall. Nominations must be supported by the signatures of five full-time or part-time continuing academic staff (other than the nominee), and must be RECEIVED in the University Secretariat by 25 March 1994, 12 o'clock noon. Nominees must be willing to serve, and normally serve a three-year term on both the Board and General Faculties Council. A biographical sketch of the nominee should accompany the letter of nomination.

If you have any questions, contact Ellen Schoeck at 492-5430 or on PROFS (eschoeck).

Student-athletes scale the heights

Of the 770 student-athletes across Canada who qualified as 1992-93 Academic All-Canadians (an academic average of 80 percent or better), the University of Alberta had 70—the highest number in Canada for the second consecutive year.

In second place are the University of Calgary and Queen's University, each with 58.

In congratulating the Academic All-Canadians, Art Quinney, Dean of the Faculty of Physical Education and Recreation, said, "I'm very proud of all our athletic teams and am as proud, if not more proud, of their academic

achievements." He added that "long after the championships have been won, this academic success will follow them beyond the University."

In 1991-92, Alberta had 59 Academic All-Canadians out of a pool of 490 student-athletes nationally. McGill University was second with 52 Academic All-Canadians, and Calgary was third overall with 38.

Following is the list of 1992-93 U of A athletes who helped make the University of Alberta the Academic All-Canadian champion of the Canadian Interuniversity Athletic Union.

Sport	Athlete	Faculty	Hometown	High school/Team:
BB	SEAN FOOTE	BUSINESS	CALGARY	WESTERN CANADA
BB	MICHAEL FRISBY	EDUCATION	GRAND FORKS	HENRY WISE WOOD - Calgary
BB	CHRIS HARRISON	ENGIN.	SHERWOOD PARK	SALISBURY
BB	SCOTT KARAIM	SCIENCE	EDMONTON	JASPER PLACE
BB	DANIEL VANHOOREN	PHYS.ED	RED DEER	CAMILLE J. LAROUGE
BCC	SCOTT CAMPBELL	SCIENCE	PONOKA	PONOKA COMPOSITE
BCC	ANDREW HAKES	EDUCATION	WINNIPEG	KELVIN HIGH SCHOOL
BCC	KELLY McCRAK	EDUCATION	EDMONTON	ARCHBISHOP McDONALD
BCC	GERALD STEWART	SCIENCE	LETHBRIDGE	LETHBRIDGE COLLEGIATE
BCC	CRAIG SULLY	REHAB.MED	RED DEER	LINDSAY THURBER
BF	JASON DUXBURY	SCIENCE	SHERWOOD PARK	SALISBURY
BF	TED EVERSON	PHARMACY	MISSISSAUGA	APPLEWOOD HEIGHTS
BF	MIKE HOGAN	SCIENCE	EDMONTON	ROSS SHEPPARD
BF	KEVIN McDOWELL	BUSINESS	EDMONTON	ROSS SHEPPARD
BF	ROBERT MOCCIA	EDUCATION	WETASKIWIN	WETASKIWIN COMPOSITE
BF	MARK REEVES	BUSINESS	SHERWOOD PARK	SALISBURY
BH	MARK GOODKEY	BUSINESS	EDMONTON	FORT SASKATCHEWAN TRADERS
BH	TODD GOODWIN	BUSINESS	SHERWOOD PARK	SHERWOOD PARK AAA MIDGETS
BH	BRIAN HARLEY	MEDICINE	EDMONTON	SAINT ALBERT SAINTS
BH	SCOTT McDONALD	ARTS	EDMONTON	EDMONTON ROYALS JR. B
BH	MIKE MOORE	BUSINESS	EDMONTON	PORTLAND WINTER HAWKS
BH	BARCLEY PEARCE	BUSINESS	SHERWOOD PARK	SHERWOOD PARK CRUSADERS
BS	JASON BOUGHER	BUSINESS	SHERWOOD PARK	SALISBURY
BS	DAVID LECHLT	SCIENCE	EDMONTON	STRATHCONA COMPOSITE
BS	ANDREW MCKEE	EDUCATION	FORT McMURRAY	FORT McMURRAY COMPOSITE

BS	TOBY VALLANCE	SCIENCE	ST. ALBERT	ST. ALBERT HS
BT	JEFFREY BEGG	REHAB.MED.	EDMONTON	STRATHCONA COMPOSITE
BT	DARREN GUMBS	SCIENCE	EDMONTON	ROSS SHEPPARD
BT	DARCY MOLSTAD	SCIENCE	EDMONTON	STRATHCONA COMPOSITE
BT	JUDE SPIERS	REHAB.MED.	EDMONTON	HARRY AINLEY
BT	DAVID STEWART	SCIENCE	LETHBRIDGE	LETHBRIDGE COLLEGIATE
BV	GREG HANSEN	PHYS.ED.	EDMONTON	STRATHCONA COMPOSITE
BW	SHANE SAUNDERS	BUSINESS	SPRUCE GROVE	SPRUCE GROVE
MSW	SEAN JONES	HOME EC.	EDMONTON	QUEEN ELIZABETH
MSW	DARREN NICHOLLS	SCIENCE	EDMONTON	HARRY AINLEY
PB	SUSAN CHALMERS	REHAB. MED	EDMONTON	ME LAZERTE
PB	BRANDI DELEEUW	EDUCATION	PONOKA	PONOKA COMPOSITE
PB	TRACIE WILKIE	BUSINESS	SHERWOOD PARK	SALISBURY
PFH	SIAN DAVIES	ARTS	EDMONTON	ROSS SHEPPARD
PFH	HEATHER JONES	SCIENCE	EDMONTON	OLD Scona ACADEMIC HS
PFH	KAREN KING	GRAD.ST.	ESTEVAN	ESTEVAN COMPOSITE
PFH	MAXI MICIAK	REHAB. MED	CAMROSE	CAMROSE HS
PFH	NICOLA MILLIONS	FAC.ST.JEAN	CALGARY	SIR WINSTON CHURCHILL
PFH	RENAE STEVENSON	ARTS	SARDIS	SARDIS SECONDARY SCHOOL
PFH	SARAH SUTMOLLER	REHAB. MED	CARSTAIRS	HUGH SUTHERLAND
PFH	BOBBI WIESE	EDUCATION	MILLBAY,BC	BRENTWOOD COLLEGE
PS	GABRIELLA MADDALENA	BUSINESS	EDMONTON	ARCHBISHOP MACDONALD
PS	LEAH MUNTAINE	BUSINESS	ST. ALBERT	PAUL KANE
PS	SHANNON ROSENOW	PHYS. ED.	EDMONTON	ROSS SHEPPARD
PS	JANINE WOOD	PHYS. ED.	EDMONTON	ROSS SHEPPARD
PT	RACHEL BROWN	EDUCATION	EDMONTON	STRATHCONA COMPOSITE
PT	HEATHER FAIRBAIRN	ARTS	EDMONTON	ROSS SHEPPARD
PT	JODI FORSTER	ARTS	EDMONTON	STRATHCONA COMPOSITE
PT	KRISTA FROHLICH	ARTS	EDMONTON	STRATHCONA COMPOSITE
PT	TAMARA KECK	SCIENCE	BEAU SEJOUR	EDWARD SCHREYER
PT	KARI MATSON	PHYS. ED.	PRINCE GEORGE	SENIOR SECONDARY
PT	SASHA NOWICKI	SCIENCE	EDMONTON	HARRY AINLEY
PT	BARB STEWART	DENTISTRY	LETHBRIDGE	LETHBRIDGE COLLEGIATE
PT	TESSA VAN OENE	SCIENCE	TILLEY	TILLEY HIGH SCHOOL
PT	BARBARA WALDIE	SCIENCE	ST. ALBERT	PAUL KANE
PT	SARA WATERTON	ARTS	ST. ALBERT	PAUL KANE
PV	DEB DYSON	PHYS.ED.	CALGARY	FATHER LACOMBE
PV	JULAINA HANSEN	REHAB. MED	KINDERSLEY	KINDERSLEY
PV	HEATHER MCINTOSH	SCIENCE	CALGARY	CRESCENT HEIGHTS
PV	JILLIAN OBORNE	ENGIN.	CREMONA	CREMONA HIGH SCHOOL
PV	SHELLEY RAPAI	PHYS.ED.	EDMONTON	MCNALLY
WSW	KELTIE DUGGAN	ARTS	EDMONTON	STRATHCONA COMPOSITE
WSW	DEB GAUDIN	BUSINESS	EDMONTON	QUEEN ELIZABETH
WSW	JANNA PROMISLOW	ARTS	EDMONTON	ROSS SHEPPARD
WSW	MARTHA TOWERS	NURSING	EDMONTON	ROSS SHEPPARD

bb = basketball, B = Bears, cc = cross country P = Pandas, t = track, M = Bears, v = volleyball, W = Pandas, sw = swimming, h = hockey, fh = field hockey, f = football, s = soccer

Student stress continued from page 1 months ago when foreign student fees increased. And in a recent survey of graduate students, 56 percent disagreed with the statement "On the whole, my experience at the U of A has been free of undue stress."

People working for the Student Financial Aid and Information Centre see the results of financial problems every day. Director Jiang Liu says there have been a number of hostile clients who have simply exploded. Staff have seen foreign students who are within a few months of finishing their programs run out of money. Another student walked in recently demanding a bursary. His wife had left him, his child was sick and his studies were suffering.

"Some of our clients are under enormous pressure," says Liu, pressures that are academic, financial and emotional. The Financial Aid Office refers some of its clients to Student Counselling Services.

University Health Services Director Gordon McInroy says the interesting thing is that students are now actually saying they're under stress. Ten years ago, very few would. People come in with all sorts of physical symptoms of stress: headaches, fatigue and abdominal problems. "One student couldn't eat for three days because of abdominal pains," says Dr McInroy.

Housing and Food Services has had stress management workshops throughout the year for students and residence floor coordinators. On 5 and 6 March there will be a two-day training session sponsored by a Calgary-based group, the Suicide Information and Education Centre. Ouellette expects the 40 to 45 spaces to be snapped up by students and floor coordinators.

Students can turn to a number of places on campus for help, however. Before they even become University of Alberta students, potential students who attend University preview days are encouraged to live in residence. If they do so, they are more likely to develop the kind of support networks they'll need to cope with the stresses of university life, Ouellette points out. CAPS staff and Students' Union leaders encourage students to get involved in clubs and organizations. "I often ask students, 'What are you doing besides school?'" says Dr McKenzie.

University Health Services offers psychiatric services, and Student Counselling Services encourages students to re-focus on what is solid in their lives. They tend to lose their sense of perspective, says Dr McKenzie. "Just getting some support goes a long way. It's so easy to lose sight of the productive things you are doing, what your strengths are and how well you are handling things. Counselling does a good job of helping shift things a bit, and helping people realize they are coping quite well. It gives them a sense of empowerment and they start to believe in themselves again."

Often turning things around starts with some very small steps. For example, the student may be encouraged to take four courses, ask for a deferral or ease up on their workload.

Having a third party listen also helps. "Counselling is a safe way of looking at things that are scary. What if you're having ambivalent feelings about your live-in boyfriend or girlfriend? You can't sit down with them and talk about that."

Dr McKenzie says that despite the incredible stress students are under, many of them cope and are remarkably resilient. "It gives you tremendous faith in human nature. People can be down and out, and yet still go to school and look after their children—and that's pretty remarkable."

Counselling is not the only way to reduce stress, Dr McKenzie points out. "I ask students, 'What's fun in your life?' and I see this blank look on their faces. It's hard for students to believe that they're actually less productive if they never have any joy in their lives. You can't just study, study, study."

Many students simply need to learn good study skills and to learn not to procrastinate, says Dr McInroy.

"We're looking at doing a wide-reaching survey on what's bothering students and how they're coping," Dr McKenzie told Folio. Such a survey would help determine the stress levels on campus, adds Dr McInroy, and would provide students with an opportunity to make suggestions for easing that stress.

Registrar Brian Silzer says his office has been systematically working to lessen the so-called "hassle factor" for students, such as recent initia-

tives to improve the timeliness of students' scholarship cheques, transcripts and signed forms. Removing these structural problems can diminish student stress, he says.

In answer to his question, If you could change anything, what would make the biggest difference? Dr McInroy says students have told him that spreading out mid-term exams would help enormously. Mid-terms, students contend, could be held before and after Reading Week.

The question that arises, says Coffin, is just how much does the University contribute to

stress levels by insisting on such high GPAs? Perhaps it is time to reevaluate what students have to do to earn degrees, says Dr McInroy.

Drs McKenzie and McInroy say that the vast majority of professors have been very good in terms of accommodating students' needs and referring students to services where they can find help.

Stress levels are way up, students are working harder and they're not having as much fun, Dr McInroy concludes. "We need to find where the major problems are and do something about them."



Students need to learn good study skills and not to procrastinate, says University Health Services Director Gordon McInroy.

Harold Powers here for Lewis Memorial Lecture

Harold Powers, professor of musicology at Princeton University, will deliver the 1994 Christopher Orlo Lewis Memorial Lecture.

In "Music as Text", Professor Powers will elaborate on music being "read" (sic interpreted) as prose text and prose text being "read" (sic illustrated) in music.

Instances include recent critical interpretations of instrumental music by Mozart and Beethoven and music written to illustrate Renaissance modal theory.

The lecture will take place 4 March at 3 pm in 2-34 Fine Arts Building. Admission is free; reception to follow.

Professor Powers, who holds degrees in piano performance from Syracuse and in composition and musicology from Princeton, also studied music in India for four years. He has published in three widely divergent fields—Italian opera, relationships between theory and compositional practice in European music, and Indian music, including comparative studies of the musics of neighbouring areas.

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

8 March, 4 pm

Akira Chiba, postdoctoral fellow, Department of Physics, University of Tokyo, "Cellular and Molecular Mechanisms of Selective Synapse Formation in *Drosophila* Neuromuscular System." Presented by Anatomy and Cell Biology. 5-10 Medical Sciences Building.

AHFMR AND PHARMACOLOGY

28 February, 4 pm

John K Buolamwini, Laboratory of Molecular Pharmacology, National Cancer Institute, Bethesda, Maryland, "Structure-Function Relationships of SAENTA-Fluorescein Conjugates: Molecular Studies." 9-68 Medical Sciences Building.

ANTHROPOLOGY

4 March, 3 pm

Avraham Ronen, University of Haifa, Israel, "The Origin of Agriculture in the Levant." 14-28 Tory Building.

ART AND DESIGN

2 March, 4 pm

Cathleen Hoeniger, Department of Art, Queen's University, "The Prestige of the Original: Early Renovations of Paintings in Italy and Modern Responses to Them." 2-20 Fine Arts Building.

BIOCHEMISTRY

25 February, 3 pm

Miroslav Radman, Institut Jacques Monod, University of Paris VII, "Genetic Control of Homeologous Recombination." Cosponsor: Alberta Heritage Foundation for Medical Research. 2-27 Medical Sciences Building.

8 March, 4 pm

Anne Galloway, "Metabolic Processing of UV-Induced DNA Damage." 4-70 Medical Sciences Building.

CHEMICAL ENGINEERING

3 March, 3:30 pm

Andrew Ursenbach, "Intelligent Maintenance Support System for Mining Truck Condition Monitoring and Troubleshooting." 342 Chemical-Mineral Engineering Building.

10 March, 3:30 pm

Trevor Parsons, "Mass Transfer from Solid to Liquid in a Rotary Drum." 342 Chemical-Mineral Engineering Building.

CLASSICS AND PHILOSOPHY

Julia Annas, University of Arizona and Visiting Professor in Classics and Philosophy, will present the following lectures and seminars:

28 February, 3:30 pm

"Virtue Ethics." L-2 Humanities Centre.

1 March, 4 pm

"Arguments from Nature: Aristotle and After." TBL-1 Tory Lecture Theatre.

4 March, 3:30 pm

"Plato's Later Political Theory." TB-W1 Tory Breezeway.

7 March, 3:30 pm

"Virtue Ethics." L-2 Humanities Centre.

8 March, 3:30 pm

"Virtue Ethics." L-2 Humanities Centre.

9 March, 3:30 pm

"Virtue Ethics." L-2 Humanities Centre.

10 March, 4 pm

"Reclaiming Virtue for Ethics." L-1 Humanities Centre.

11 March, 3:30 pm

"Plato's Socrates: Philosophy and Dialogue." L-2 Humanities Centre.

Comparative Literature and Film Studies

1 March, 5 pm

Christopher Gibbins, "Don't forget, I have to be the leader": Harlequin Romances and Masochistic Desire." Senate Chamber, Arts Building.

TALKS

COMPUTING SCIENCE

28 February, 3:30 pm

Robert S Boyer, University of Texas at Austin, "On Automated Reasoning and its Application to Proving Theorems About Software and Hardware." 2104 Dentistry-Pharmacy Centre.

7 March, 3:30 pm

Alan K Mackworth, University of British Columbia, "On Seeing Robots." 2104 Dentistry-Pharmacy Centre.

EAST ASIAN STUDIES AND CONSULATE GENERAL OF JAPAN

4 March, 3 pm

Joseph Kees, University of Victoria, "Ambiguity in Japanese and English." 504 Arts Building.

ECHO HEALTHCARE FORUM

3 March, 7 pm

Norah Keating, Tricia Marck, Susan McDaniel, Corry Morcos and Richard Plain, "Shifting Healthcare to the Home: A Woman's Issue?" Admission is free, but advance tickets are required. Tickets available from the University of Alberta Hospitals information desks. Information: 492-1644. Bernard Snell Hall, Mackenzie Health Sciences Centre.

ECONOMICS

8 March, 3:30 pm

Jack Mintz, Arthur Andersen Professor of Taxation, Faculty of Management, University of Toronto, "The Future of Tax Policy in Canada." 2-09 Business Building.

10 March, 3:30 pm

Dr Mintz, "Reallocation Versus Harmonization of Tax Fields in Canada." 10-04 Tory Building.

11 March, noon

Dr Mintz, "Capital Taxation and the Economic Integration of the Americas." Faculty Lounge, 4th Floor, Law Centre.

EIGHTEENTH CENTURY STUDIES GROUP

2 March, 4:30 pm

Forum on "Communication in the Eighteenth Century: The Novel and the Print," with speakers Anne-Marie Link and Juliet McMaster. 326 Arts Building.

ENGLISH

2 March, 4 pm

Toril Moi, Literature Program, Duke University, "Personal Genealogy—A Materialist Feminist Approach to Subjectivity, Focused on the Case of Simone de Beauvoir." L-3 Humanities Centre.

4 March, 3 pm

Toril Moi, "Cultural Capital—Appropriating the Sociology of Pierre Bourdieu for Feminist Purposes." L-3 Humanities Centre.

8 March, 2 pm

Toril Moi, "Feminist Theory—From Socialist Feminism to Materialist Feminism: Rereading *The Second Sex*." L-3 Humanities Centre.

10 March, 2 pm

Toril Moi, "Reading for the Affects—Case Material: The Rhetoric of Depression in Simone de Beauvoir's Autobiographies and Letters." L-3 Humanities Centre.

ENTOMOLOGY

3 March, 4 pm

Carole Challoner, "The White of Their Eyes: A Characterization of the *White Eye* Colour Mutant in the Tsetse Fly, *Glossina morsitans submorsitans* Newstead (Diptera: Muscidae)." TB-W1 Tory Breezeway.

10 March, 4 pm

Scott Digweed, "Ecology of Birch-Leafmining Sawflies in Alberta (Hymenoptera: Tenthredinidae)." TB-W1 Tory Breezeway.

FACULTÉ SAINT-JEAN

4 mars, 8h30-18h30

Journee Du Savoir de l'ACFAS—Alberta et de l'Institut de recherche de la Faculté Saint-Jean. Quatorze communications en sciences humaines, naturelles et sociales. Conférencière invitée: Maître Bartha Maria Knoppers, "Le Droit face aux nouvelles technologies en génétique." Renseignements: Frank McMahon ou Laurent Godbout au 465-8700.

FOOD SCIENCE AND NUTRITION

28 February, 12:30 pm

G Wu, Department of Animal Science, Texas A&M University, "Amino Acid Metabolism in Enterocytes of the Developing Pig." Sponsor: Alberta Heritage Foundation for Medical Research. 2J4.02 Mackenzie Health Sciences Centre.

FOREST SCIENCE

2 March, noon

Stan Navratil, Natural Resources Canada, "Sustained Productivity of Aspen on Hardwood and Mixedwood Sites." 821 General Services Building.

9 March, noon

Ted Hogg, research scientist, Canadian Forest Service, "Climate and the Southern Limit of the Boreal Forest." 821 General Services Building.

GENETICS

4 March, 3:30 pm

Ian MacDonald, "Candidate Gene Approach or Positional Cloning: The Example of Choroideremia." G-116 Biological Sciences Centre.

GEOGRAPHY

4 March, 3 pm

Larry Bourne, Department of Geography, University of Toronto, "Life on the Edge: Challenges and Opportunities for Geographical Research." TB-87 Tory Building.

GERMANIC LANGUAGES

4 March, 3 pm

Gertrud Jaron Lewis, Laurentian University, "The Late Medieval Sister-Books—A Much Maligned (If Not Forgotten) Chapter of Women's Literature." 326 Senate Chamber.

HUMAN ECOLOGY

1 March, 3:30 pm

Anne Bagan, Don Bagan, Carla Costuros, Reiner Lowan, Amy Luke Lowan, Brenda Malkinson and Ron Wigglesworth, "Envisioning the Environment: Artists' Views of the Northern Landscape." 207A Law Centre.

8 March, 3:30 pm

Lesley Just, Tamara Tuchak and Eloise Murray, "Inuit Women and Statistical Indicators: Barely Visible." 207A Law Centre.

INSTITUTE OF GEOPHYSICS, METEOROLOGY AND SPACE PHYSICS

10 March, 2 pm

Jacek Majorowicz, Northern Geothermal, "Underground Record of Changing Climate in Western Canada." 631 Physics Building.

LIMNOLOGY AND FISHERIES DISCUSSION GROUP

3 March, 12:30 pm

Angeline Lam, "Occurrence, Control, and Persistence of the Cyanobacterial Toxin, Microcystin-LR." G-116 Biological Sciences Centre.

10 March, 12:30 pm

Karen Kidd, "You Are What You Eat: Using Stable Carbon and Nitrogen Isotopes to Trace the Biomagnification of Contaminants Through Freshwater Food Webs." G-116 Biological Sciences Centre.

PERINATAL RESEARCH CENTRE

1 March, noon

Computing and Network Services, "Exploring the Internet." 2J4.02 Mackenzie Health Sciences Centre.

8 March, noon

Don Morrish, "Regulation of Placental Differentiation." 2J4.02 Mackenzie Health Sciences Centre.

PETER JACYK CENTRE FOR UKRAINIAN HISTORICAL RESEARCH

9 March, 3:30 pm

Frances Swyripa, "Church and Court Records From the Lviv Archives as a Source for Ukrainian Gender Relationships." 352 Athabasca Hall.

PHARMACY AND PHARMACEUTICAL SCIENCES

10 March, 3 pm

Robert A Blouin, Division of Pharmacology and Experimental Therapeutics, College of Pharmacy, University of Kentucky, "Cytochrome P450 Enzymes: Mechanism of Phenobarbital Induction." Sponsor: Alberta Heritage Foundation for Medical Research. 2031 Dentistry-Pharmacy Centre.

PLANT SCIENCE

1 March, 12:30 pm

Peter Blenis, "Epidemiology and Management of Western Gall Rust." 1-06 Agriculture-Forestry Centre.

3 March, 12:30 pm

Dong Hua, "Function of the Role ABC Genes of *Agrobacterium Rhizogenes*." 1-06 Agriculture-Forestry Centre.

10 March, 12:30 pm

Su-jun Deng, Institute for Biological Sciences, National Research Council of Canada, "Phage-display and *in vitro* Affinity Maturation Systems in Antibody Engineering." 1-06 Agriculture-Forestry Centre.

RURAL ECONOMY

28 February, 3:15 pm

Bruno Jean, professor, Department of Sociology, Université du Québec à Rimouski, "Rurality and Rural Policy: Some Considerations for Sustainable Rural Development." 519 General Services Building.

3 March, 3:15 pm

Steven Schilizzi, Sr, research scientist, Institut National de la Recherche Agronomique, Montpellier, France, "Integrating Agro-ecological and Socio-economic Rural Dynamics." 519 General Services Building.

7 March, 3:15 pm

Kristine McLeod, "Incorporating Perceptions of Site Quality for Moose Hunting in a Travel Cost Model." 519 General Services Building.

SCHOOL OF LIBRARY AND INFORMATION STUDIES

3 March, 7:30 pm

David H Jenkinson, "The Changing Faces of Censorship in Public Schools." 2nd Floor, McCauley Chambers, 1 Kingsway.

Talks continued on page 7

4 March, 10 am

Dr Jenkinson, "School Libraries: An Environment of Change." 3112 Rutherford North.

8 March, noon

Dr Jenkinson, "Trends in Public School Library Censorship." 301 Rutherford South.

SLAVIC AND EAST EUROPEAN STUDIES

2 March, 3:30 pm

Liudmila Kuzmitcheva, Department of History, Moscow State University, Stuart Ramsay Tompkins Visiting Professor, "Bosnia and Herzegovina: Past and Present." 436 Arts Building.

SOCIOLOGY

2 March, noon

Luis Roniger, Hebrew University of Jerusalem, "Individualism and Communalism in Israel." 5-15 Tory Building.

SOIL SCIENCE

3 March, 12:30 pm

Marcelo Zarate, Argentine quaternary geologist and paleopedologist, "Quaternary Stratigraphy, History and Paleoclimatology of South America." 2-36 Earth Sciences Building.

10 March, 12:30 pm

Dave Sego, "Freeze-Thaw Dewatering of Oil Sands Fine Tails as a Potential Reclamation Approach." 2-36 Earth Sciences Building.

ZOOLOGY

4 March, 3:30 pm

Lynda Corkum, University of Windsor, "Predicting and Modifying Invertebrate Assemblages in Rivers." M-149 Biological Sciences Centre.

This symbol denotes environmentally-related seminars/ events. If you wish to have an environmentally-related event listed in this manner, please contact: The Environmental Research and Studies Centre, 492-6659.

EVENTS

EXHIBITIONS

EXTENSION CENTRE GALLERY

Until 18 March

"The Poster, communication design"—an exhibition of posters featuring advertising, music, women's issues, and the environment. Gallery hours: Monday to Thursday, 8:30 am to 8 pm; Friday, 8:30 am to 4:30 pm; Saturday, 9 am to noon. Information: 492-3034. 2-54 University Extension Centre.

FAB GALLERY

Until 6 March

"Jessica Ortega-Nava—Kitchen Island System"—this exhibition is the final visual presentation in partial fulfillment for the degree of Master of Design in Industrial Design. Gallery hours: Tuesday to Friday, 10 am to 5 pm; Sunday, 2 to 5 pm; Saturday, Monday and statutory holidays, closed. 1-1 Fine Arts Building.

MCMULLEN GALLERY

Until 27 February

"Pluralism in Alberta Prints 1970-1985"—from the collection of the Alberta Foundation

for the Arts. Curated by Bente Roed. Gallery hours: Monday to Friday, 10 am to 4 pm; Saturday and Sunday, 1 to 4 pm, evenings subject to availability of volunteers. Information: 492-8428 or 492-4211. Mackenzie Health Sciences Centre.

MUSIC

DEPARTMENT OF MUSIC

26 February, 7 pm

Northern Alberta Band Concert. Convocation Hall.

4 and 5 March, 8 pm

Opera Performance. Convocation Hall.

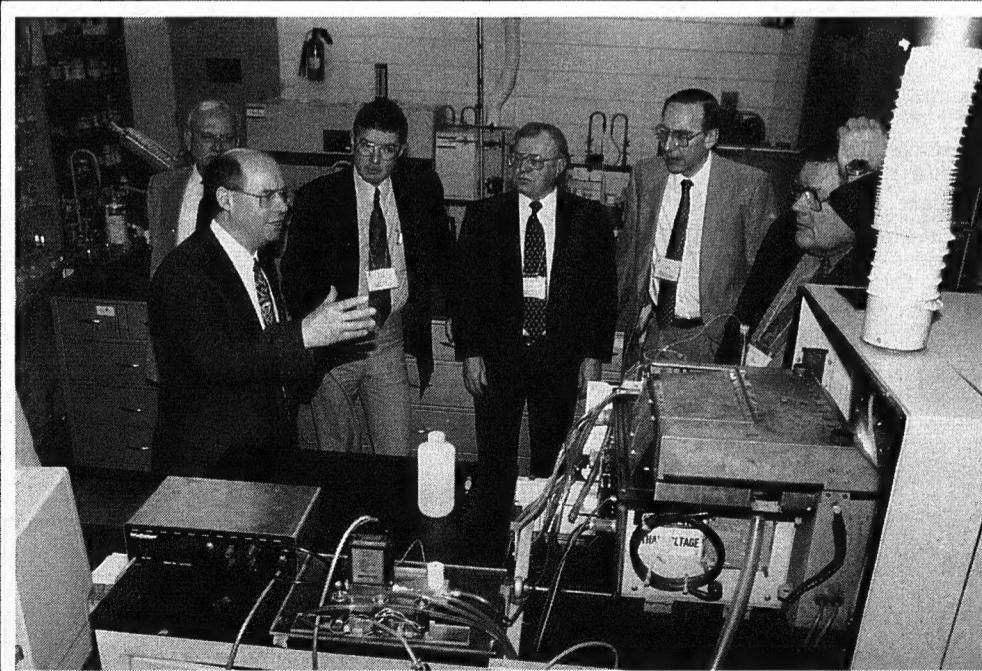
8 March, 8 pm

Orchestral Winds Concert. Convocation Hall.

EDMONTON CHAMBER MUSIC SOCIETY

9 March, 8 pm

"Trio Arcangelo Corelli"—baroque violin, gamba, harpsichord. Tickets available at the door. Information: 433-4532. Convocation Hall.



Learning about new techniques for elemental analysis from Gary Horlick (Chemistry) are five members of the Faculty of Science Visiting Committee. With Dr Horlick are, left to right, Ronald Micetich, John McDougall, John Holden, John Osborne, and Donald Currie. Seven other laboratories in the Faculty were toured by groups of Visiting Committee members during the program 17 and 18 February.

ADS

ACCOMMODATIONS AVAILABLE

VICTORIA PROPERTIES - Knowledgeable, trustworthy realtor with Edmonton references will answer all queries, send information, no cost/obligation. "Hassle-free" property management provided. (604) 595-3200, Lois Dutton, Re/Max ports west, Victoria, B.C.

MICHENER PARK - Two bedroom rowhouses and apartments for rent in University residence located in southwest Edmonton. Excellent bus service to University, utilities included. University enquiries welcome, 492-7044.

RENT - Strathearn Drive, executive two storey, fully furnished. 1 March to 31 July 1994, \$1,000/month. Jacuzzi, hardwood floors, renovated throughout. City view. Western Relocation, 434-4629.

RENT - Ottewell, renovated two storey, four bedroom with delightful sunroom off living room. Formal dining room. Yard has fruit trees, large deck. Partially or furnished. Western Relocation, 434-4629.

SALE - Charming two storey, Old Strathcona. Ron, 439-3300.

RENT - May - July, fully furnished three bedroom house 1 km south of University. New hardwood floors, totally new kitchen, garden. \$900/month. 492-5731, 438-7886.

RENT - Sabbatical beachfront home. Quiet, scenic three bedroom, 1,528', five appliances, dock lease. \$800. No pets, nonsmokers. South Buffalo Lake. 1-742-0808.

SALE - Windsor Park, overlooking Edinboro Park sits this elegant, four bedroom, two storey. Master bedroom with ensuite, fireplace, family room, large deck. \$269,800. 9239 118 Street. Joan, Re/Max Realty. 433-9025, 438-7000.

RENT - South Garneau, five blocks University. Quiet! Lovingly renovated two bedroom home (nonsmoking). Oak flooring, temporary gas fireplace, deck, appliances. Ultimate double garage! \$900. 439-4406.

RENT - Furnished three bedroom bungalow, Castledowns. Finished basement, double garage, two fireplaces. Possession date open and flexible. \$800 monthly. Phone 456-8864.

SALE - Belgravia, huge 1,700' semi, four bedrooms plus developed basement. Newer double garage, hardwood, south yard. \$169,000. Ed Lastiwka, Royal LePage Realty, 446-3800.

Native Awareness Days combines seriousness and fun

The Aboriginal Student Council is holding its 5th Annual Native Awareness Days, 16-18 March, in Dinwoodie Lounge. This year's theme is "Pride in the Past—Force in the Future."

On 16 March, from 9 to 5 pm, various Indian and Metis elders will share their knowledge about their traditions, language and culture.

Lectures and panel discussions will take place from 9 to 6 pm, 17 March. Pow wow dances, jiggers and hand games will take place from 7 to 11 pm.

On the 18th, the Aboriginal Law Students Association will hold lectures and panel presentations in the Law Centre. The Lorraine Courtrille Memorial Round Dance will take place starting at 6 pm, at the Butterdome.

Everyone is welcome to attend any event at no charge. For further information, phone the Aboriginal Student Council at 492-9214.

RENT - Oliver, luxurious condominium with spectacular river valley view. One bedroom, dining/den, sunroom, underground parking. No pets. Available immediately. 454-2125.

RENT - Southside, executive four bedroom, four bathroom home. Near University, shopping, schools. Furnished \$1,600, partially \$1,300, utilities extra. Nonsmokers only. Available 1 July, two/three year lease (negotiable). 492-5813, 434-3941.

SALE - Old Strathcona, well-kept split level. New siding, carpets and furnace. Beautiful hardwood floors and corner windows. 1 1/2 baths, two plus one bedrooms. Reduced price, \$118,800. 10540 85 Avenue. 439-1671.

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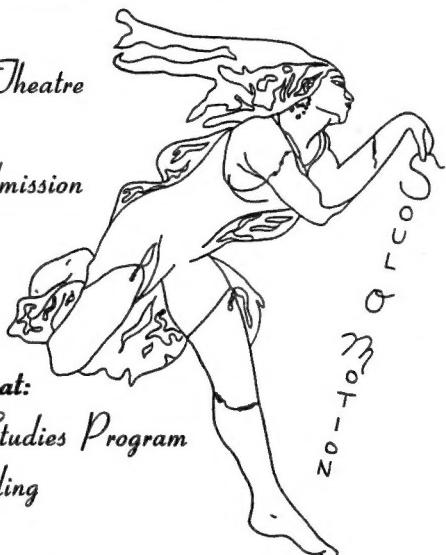
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